



PCT09

RAW SEQUENCE LISTING

DATE: 06/06/2002

PATENT APPLICATION: US/09/980,523A

TIME: 12:54:20

Input Set : A:\Woblaoin.app

Output Set: N:\CRF3\06062002\I980523A.raw

ENTERED

3 <110> APPLICANT: CHOPPIN, JEANNINE
 4 BOURGAULT VILLADA, ISABELLE
 5 GUILLET, JEAN-GERARD
 6 CONNAN, FRANCINE
 7 FERRIES, ESTELLE
 9 <120> TITLE OF INVENTION: POLYPEPTIC PROTEIN FRAGMENTS OF THE E6 AND E7
 10 PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
 11 PARTICULARLY IN VACCINATION
 13 <130> FILE REFERENCE: WOBI AO INS
 15 <140> CURRENT APPLICATION NUMBER: 09/980,523A
 C--> 16 <141> CURRENT FILING DATE: 2002-04-29
 18 <150> PRIOR APPLICATION NUMBER: PCT/FR00/01513
 19 <151> PRIOR FILING DATE: 2000-05-31
 21 <150> PRIOR APPLICATION NUMBER: FR 99/07012
 22 <151> PRIOR FILING DATE: 1999-06-03
 24 <160> NUMBER OF SEQ ID NOS: 24
 26 <170> SOFTWARE: PatentIn Ver. 2.1
 28 <210> SEQ ID NO: 1
 29 <211> LENGTH: 477
 30 <212> TYPE: DNA
 31 <213> ORGANISM: Human Papillomavirus
 33 <220> FEATURE:
 34 <221> NAME/KEY: CDS
 35 <222> LOCATION: (1)..(477)
 37 <400> SEQUENCE: 1
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 40 1 5 10 15
 42 aga aag tta cca cag tta tgc aca gag ctg caa aca act ata cat gat 96
 43 Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Gln Thr Thr Ile His Asp
 44 20 25 30
 46 ata ata tta gaa tgt gtg tac tgc aag caa cag tta ctg cga cgt gag 144
 47 Ile Ile Leu Glu Cys Val Tyr Cys Lys Gln Gln Leu Leu Arg Arg Glu
 48 35 40 45
 50 gta tat gac ttt gct ttt cgg gat tta tgc ata gta tat aga gat ggg 192
 51 Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile Val Tyr Arg Asp Gly
 52 50 55 60
 54 aat cca tat gct gta tgt gat aaa tgt tta aag ttt tat tct aaa att 240
 55 Asn Pro Tyr Ala Val Cys Asp Lys Cys Leu Lys Phe Tyr Ser Lys Ile
 56 65 70 75 80
 58 agt gag tat aga cat tat tgt tat agt ttg tat gga aca aca tta gaa 288
 59 Ser Glu Tyr Arg His Tyr Cys Tyr Ser Leu Tyr Gly Thr Thr Leu Glu
 60 85 90 95

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62 cag caa tac aac aaa ccg ttg tgt gat ttg tta att agg tgt att aac 336
63 Gln Gln Tyr Asn Lys Pro Leu Cys Asp Leu Leu Ile Arg Cys Ile Asn
64      100      105      110
66 tgt caa aag cca ctg tgt cct gaa gaa aag caa aga cat ctg gac aaa 384
67 Cys Gln Lys Pro Leu Cys Pro Glu Glu Lys Gln Arg His Leu Asp Lys
68      115      120      125
70 aag caa aga ttc cat aat ata agg ggt cgg tgg acc ggt cga tgt atg 432
71 Lys Gln Arg Phe His Asn Ile Arg Gly Arg Trp Thr Gly Arg Cys Met
72      130      135      140
74 tct tgt tgc aga tca tca aga aca cgt aga gaa acc cag ctg tga 477
75 Ser Cys Cys Arg Ser Ser Arg Thr Arg Arg Glu Thr Gln Leu
76 145      150      155
79 <210> SEQ ID NO: 2
80 <211> LENGTH: 158
81 <212> TYPE: PRT
82 <213> ORGANISM: Human Papillomavirus
84 <400> SEQUENCE: 2
85 Met His Gln Lys Arg Thr Ala Met Phe Gln Asp Pro Gln Glu Arg Pro
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88 Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Gln Thr Thr Ile His Asp
89      20      25      30
91 Ile Ile Leu Glu Cys Val Tyr Cys Lys Gln Gln Leu Leu Arg Arg Glu
92      35      40      45
94 Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile Val Tyr Arg Asp Gly
95      50      55      60
97 Asn Pro Tyr Ala Val Cys Asp Lys Cys Leu Lys Phe Tyr Ser Lys Ile
98 65      70      75      80
100 Ser Glu Tyr Arg His Tyr Cys Tyr Ser Leu Tyr Gly Thr Thr Leu Glu
101      85      90      95
103 Gln Gln Tyr Asn Lys Pro Leu Cys Asp Leu Leu Ile Arg Cys Ile Asn
104      100      105      110
106 Cys Gln Lys Pro Leu Cys Pro Glu Glu Lys Gln Arg His Leu Asp Lys
107      115      120      125
109 Lys Gln Arg Phe His Asn Ile Arg Gly Arg Trp Thr Gly Arg Cys Met
110      130      135      140
112 Ser Cys Cys Arg Ser Ser Arg Thr Arg Arg Glu Thr Gln Leu
113 145      150      155
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117 <211> LENGTH: 90
118 <212> TYPE: DNA
119 <213> ORGANISM: Human Papillomavirus
121 <220> FEATURE:
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123 <222> LOCATION: (1)..(90)
125 <400> SEQUENCE: 3
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127 Arg Pro Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Gln Thr Thr Ile
128 1      5      10      15
130 cat gat ata ata tta gaa tgt gtg tac tgc aag caa cag tta 90

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131 His Asp Ile Ile Leu Glu Cys Val Tyr Cys Lys Gln Gln Leu
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136 <211> LENGTH: 30
137 <212> TYPE: PRT
138 <213> ORGANISM: Human Papillomavirus
140 <400> SEQUENCE: 4
141 Arg Pro Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Gln Thr Thr Ile
142   1                      5                      10                      15
144 His Asp Ile Ile Leu Glu Cys Val Tyr Cys Lys Gln Gln Leu
145      20                      25                      30
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149 <211> LENGTH: 66
150 <212> TYPE: DNA
151 <213> ORGANISM: Human Papillomavirus
153 <220> FEATURE:
154 <221> NAME/KEY: CDS
155 <222> LOCATION: (1)..(66)
157 <400> SEQUENCE: 5
158 cga cgt gag gta tat gac ttt gct ttt cgg gat tta tgc ata gta tat      48
159 Arg Arg Glu Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile Val Tyr
160   1                      5                      10                      15
162 aga gat ggg aat cca tat                                          66
163 Arg Asp Gly Asn Pro Tyr
164      20
167 <210> SEQ ID NO: 6
168 <211> LENGTH: 22
169 <212> TYPE: PRT
170 <213> ORGANISM: Human Papillomavirus
172 <400> SEQUENCE: 6
173 Arg Arg Glu Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile Val Tyr
174   1                      5                      10                      15
176 Arg Asp Gly Asn Pro Tyr
177      20
180 <210> SEQ ID NO: 7
181 <211> LENGTH: 87
182 <212> TYPE: DNA
183 <213> ORGANISM: Human Papillomavirus
185 <220> FEATURE:
186 <221> NAME/KEY: CDS
187 <222> LOCATION: (1)..(87)
189 <400> SEQUENCE: 7
190 att agt gag tat aga cat tat tgt tat agt ttg tat gga aca aca tta      48
191 Ile Ser Glu Tyr Arg His Tyr Cys Tyr Ser Leu Tyr Gly Thr Thr Leu
192   1                      5                      10                      15
194 gaa cag caa tac aac aaa ccg ttg tgt gat ttg tta att                                          87
195 Glu Gln Gln Tyr Asn Lys Pro Leu Cys Asp Leu Leu Ile
196      20                      25
199 <210> SEQ ID NO: 8

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205 Ile Ser Glu Tyr Arg His Tyr Cys Tyr Ser Leu Tyr Gly Thr Thr Leu
206   1           5           10           15
208 Glu Gln Gln Tyr Asn Lys Pro Leu Cys Asp Leu Leu Ile
209           20           25
212 <210> SEQ ID NO: 9
213 <211> LENGTH: 66
214 <212> TYPE: DNA
215 <213> ORGANISM: Human Papillomavirus
217 <220> FEATURE:
218 <221> NAME/KEY: CDS
219 <222> LOCATION: (1)..(66)
221 <400> SEQUENCE: 9
222 tgt cct gaa gaa aag caa aga cat ctg gac aaa aag caa aga ttc cat   48
223 Cys Pro Glu Glu Lys Gln Arg His Leu Asp Lys Lys Gln Arg Phe His
224   1           5           10           15
226 aat ata agg ggt cgg tgg   66
227 Asn Ile Arg Gly Arg Trp
228           20
231 <210> SEQ ID NO: 10
232 <211> LENGTH: 22
233 <212> TYPE: PRT
234 <213> ORGANISM: Human Papillomavirus
236 <400> SEQUENCE: 10
237 Cys Pro Glu Glu Lys Gln Arg His Leu Asp Lys Lys Gln Arg Phe His
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240 Asn Ile Arg Gly Arg Trp
241           20
244 <210> SEQ ID NO: 11
245 <211> LENGTH: 297
246 <212> TYPE: DNA
247 <213> ORGANISM: Human Papillomavirus
249 <220> FEATURE:
250 <221> NAME/KEY: CDS
251 <222> LOCATION: (1)..(297)
253 <400> SEQUENCE: 11
254 atg cat gga gat aca cct aca ttg cat gaa tat atg tta gat ttg caa   48
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256   1           5           10           15
258 cca gag aca act gat ctc tac tgt tat gag caa tta aat gac agc tca   96
259 Pro Glu Thr Thr Asp Leu Tyr Cys Tyr Glu Gln Leu Asn Asp Ser Ser
260           20           25           30
262 gag gag gag gat gaa ata gat ggt cca gct gga caa gca gaa ccg gac   144
263 Glu Glu Glu Asp Glu Ile Asp Gly Pro Ala Gly Gln Ala Glu Pro Asp
264           35           40           45
266 aga gcc cat tac aat att gta acc ttt tgt tgc aag tgt gac tct acg   192

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267 Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys Lys Cys Asp Ser Thr
268      50      55      60
270 ctt cgg ttg tgc gta caa agc aca cac gta gac att cgt act ttg gaa 240
271 Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg Thr Leu Glu
272 65      70      75      80
274 gac ctg tta atg ggc aca cta gga att gtg tgc ccc atc tgt tct cag 288
275 Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys Ser Gln
276      85      90      95
278 aaa cca taa 297
279 Lys Pro
282 <210> SEQ ID NO: 12
283 <211> LENGTH: 98
284 <212> TYPE: PRT
285 <213> ORGANISM: Human Papillomavirus
287 <400> SEQUENCE: 12
288 Met His Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu Asp Leu Gln
289 1      5      10      15
291 Pro Glu Thr Thr Asp Leu Tyr Cys Tyr Glu Gln Leu Asn Asp Ser Ser
292      20      25      30
294 Glu Glu Glu Asp Glu Ile Asp Gly Pro Ala Gly Gln Ala Glu Pro Asp
295      35      40      45
297 Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys Lys Cys Asp Ser Thr
298      50      55      60
300 Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg Thr Leu Glu
301 65      70      75      80
303 Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys Ser Gln
304      85      90      95
306 Lys Pro
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310 <211> LENGTH: 69
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312 <213> ORGANISM: Human Papillomavirus
314 <220> FEATURE:
315 <221> NAME/KEY: CDS
316 <222> LOCATION: (1)..(69)
318 <400> SEQUENCE: 13
319 gga gat aca cct aca ttg cat gaa tat atg tta gat ttg caa cca gag 48
320 Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu Asp Leu Gln Pro Glu
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323 aca act gat ctc tac tgt tat 69
324 Thr Thr Asp Leu Tyr Cys Tyr
325      20
328 <210> SEQ ID NO: 14
329 <211> LENGTH: 23
330 <212> TYPE: PRT
331 <213> ORGANISM: Human Papillomavirus
333 <400> SEQUENCE: 14
334 Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu Asp Leu Gln Pro Glu
335 1      5      10      15

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/980,523A

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TIME: 12:54:21

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